

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 09/720,663  
Confirmation No.: 3905  
First-Named Inventor: William M. Ayers  
Filing Date: August 6, 2001  
Group Art Unit: 1753  
Examiner: Kishor Mayekar  
Attorney Docket No.: 009017-000015  
Title: METHOD AND APPARATUS FOR THE PREPARATION OF HIGH  
PURITY PHOSPHINE OR OTHER GAS

**REQUEST FOR PRE-APPEAL BRIEF REVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is a Request for a Pre-Appeal Brief Review under the provisions of the Patent and Trademark Office's published rule for the same. Claims 11-21 and 32-50 stand rejected under 35 U.S.C. § 103. It is believed that the stated rejections are clearly erroneous on their face. It is therefore requested that the Panel review and order withdrawal of the rejections.

As basis for this request, the Panel's attention is directed to the claims, as amended, in the Amendment and Reply to Office Action dated March 21, 2007 and the Remarks beginning at page 8 through the bottom of page 10 of said Amendment and Reply to Office Action. In addition, the following supplementary remarks are provided to address the comments set forth in the Office Action dated June 7, 2007.

## REMARKS

The present claimed invention concerns chemical reactor systems for generating gases useful for semiconductor fabrication. In order to provide a system for generating the gas, a number of elements are recited. In addition, in the latest amendment, it was required that the "system is configured to generate said high purity gas containing no more than 100 parts per million of water vapor". All pending claims have this feature. This is a feature that would be important in the generation of high purity gases such as those used in the fabrication of semiconductor devices.

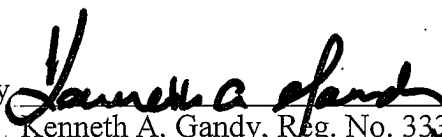
With this background, it is noted that the primary reference in all of the rejections, U.S. Patent No. 6,224,836 to Moisan et al., is directed to waste gas processing or remediation, in which undesirable compounds in waste gas are destroyed. This Moisan et al. reference is used as the primary reference in all applied rejections. Neither Moisan nor any of the secondary references expressly teaches a system that is configured to generate the gas containing no more than 100 parts per million of water vapor. In support of maintaining the rejection, the Office Action states that "Moisan's device is capable of generating the high purity gas as claimed and inherently possesses the added claimed feature." When assessed against the relevant standard of review, this statement is in error and thus the rejections are unsupported.

As noted, Moisan et al. contains absolutely no express teaching of a system that achieves the stated level of purity as to water vapor. The Examiner asserts that the feature is inherent without providing any technical explanation as to why it must necessarily be the case. On this point, it is well established that "Inherency...may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51. Furthermore,

considering that Moisan et al. is concerned with waste gas remediation, there would appear to be no particular reason why one skilled in the art reading Moisan et al. would necessarily design the system to achieve such a high purity gas as claimed. The primary purpose of the Moisan et al. system is the destruction of undesirable components of waste gases, and not in the generation of a high purity gas stream such as that which would be useful in the fabrication of semiconductor devices. As such, the Examiner's reliance upon Moisan et al. as necessarily teaching a system configured to generate a gas containing no more than 100 parts per million of water vapor is clear error, and all rejections should be withdrawn.

For the above reasons at the least, the claims require a combination of features not taught or suggested by the references as combined in the Office Action. Of particular note, none of the references expressly or inherently teaches a system configured to generate the low water vapor gas as claimed, or any reason that one should modify the waste gas treatment system of the primary Moisan et al. reference to achieve such a gas stream. It is thus requested that the Panel withdraw all rejections of record and pass this application on to allowance.

Respectfully submitted,

By   
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